

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,821,756 B2
DATED : November 23, 2004
INVENTOR(S) : Satoshi Koizumi et al.

Page 1 of 7

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page, Item [54] and Column 1, line 1,

Title, "REPRODUCING" should read -- PRODUCING --.

Title page.

Item [56], **References Cited, FOREIGN PATENT DOCUMENTS**,
"EP 0553821 8/1993" should be deleted (duplicate entry).
"JP 02177891 7/1990" should read -- JP 02-177891 7/1990 --.
OTHER PUBLICATIONS, "Zapata et al. J. Biol. Chem. vol. 264(25),14769-14774.*"
should read -- Zapata et al. J. Biol. Chem., Vol. 264(25):14769-14774.* --.
"J. Sci. Industr. Res., vol. 21C (Dec. 1962), pp. 352-354.; Pattabiraman et al.,."
should read -- J. Sci. Industr. Res., Vol. 21C (Dec. 1962), pp. 352-354. Pattabiraman et al. --.
"J. Org. Chem., vol. 57 (1992), pp. 146-151. Heidlas J.E. et al.,." should read -- J. Org.
Chem., Vol. 57 (1992), pp. 146-151. Heidlas J.E. et al. --.
"Analytic Biochemistry, vol. 91 (1978), pp. 490-495. Rao H K., Mendicino J.,." should read
-- Analytic Biochemistry, Vol. 91 (1978), pp. 490-495. Rao H K., Mendicino J. --.

Column 3.

Line 6, "blot" should read -- broth --;
Line 13, "and" (first occurrence) should read -- an --;
Line 35, "pTR7" should read -- pTK7 --; and
Line 50, "galk" should read -- galK --.

Column 4.

Line 35, "(inorganic)pyrophosphatase" should read -- (inorganic) pyrophosphatase --.

Column 7.

Line 2, "DMA" should read -- DNA --; and
Lines 42, 44, 61 and 63, "Corynabacterium" should read -- Corynebacterium --.

Column 8.

Lines 12, 14, 58 and 60, "Corynabacterium" should read -- Corynebacterium --; and
Line 52, "in" should read -- is --.

Column 9.

Lines 33 and 35, "Corynabacterium" should read -- Corynebacterium --.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 10.

Line 8, "microorganism described" should read -- microorganisms described --;
Lines 24 and 25, "microorganism" should read -- microorganisms --;
Line 30, "ism" should read -- isms --;
Lines 32 and 45, "Corynabacterium" should read -- Corynebacterium --; and
Line 62, "UDP-Glc fr" should read -- UDP GlcNAc from --.

Column 11.

Lines 3 and 18, "microorganisms" should read -- microorganism --;
Table 2, "galU gene J. Biochem, 115, 965 (1994)" should read -- galU gene J. Biochem.,
115, 965 (1994) --;
Table 2, "glmU gene J. Bacteriol, 175, 6150 (1993)" should read -- glmU gene J. Bacteriol.,
175, 6150 (1993) --; and
Table 2, "pgm gene J. Bacteriol, 176, 5847 (1994)" should read -- pgm gene J. Bacteriol.,
176, 5847 (1994) --.

Column 12.

Line 3, "organism" should read -- organisms --;
Lines 4 and 67, "Corynabacterium" should read -- Corynebacterium --;
Line 58, "coli DB1," should read -- coli DHL, --; and
Line 66, "Corynabac-" should read -- Corynebac- --.

Column 13.

Line 1, "Corynabacterium" should read -- Corynebacterium --.

Column 14.

Line 7, "tetracycline," should read -- tetracycline --; and
Line 32, "culture" should read -- cultured --.

Column 15.

Line 32, "pyrivic" should read -- pyruvic --;
Line 53, "Nymean" should read -- Nymeen --; and
Line 55, "catyl" should read -- cetyl --.

Column 16.

Line 28, "UV 262 nM" should read -- UV 262 nm --; and
Line 39, "in" should be deleted.

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Column 17.

Line 22, "Helicobactar" should read -- Helicobacter --; and
Line 56, "culturesupernatant" should read -- culture supernatant --.

Column 18.

Line 2, "units" should read -- unit --;
Line 15, "Mncl₂," should read -- MnCl₂, --;
Line 46, "LS-tetrasaccharide α ," should read -- LS-tetrasaccharide c, --; and "(3')sialyllacto-N-neotetraose" should read -- (α 2,3)sialyllacto-N-neotetraose --; and
Line 56, "N-acetylamnosamine," should read -- N-acetylmannosamine, --.

Column 19.

Line 1, "(3')sialyllacto-N-tetraose," should read -- (α 2,3)sialyllacto-N-neotetraose, --;
Line 13, "GlcNac β 1-4G1c, GlcNAc β 1-3G1cNac," should read -- GlcNAc β 1-4Glc,
GlcNAc β 1-3GlcNAc, --;
Line 14, "GlcNac β 1-4GlcNAc, GlcNac β 1-6GalNAc," should read -- GlcNAc β 1-4GlcNAc,
GlcNAc β 1-6GalNAc, --;
Line 19, "GlcUA β 1-3Ga1Nac," should read -- GlcUA β 1-3GalNAc, --;
Line 27, "6or" should read -- 6 or --; and
Line 49, "N-acetylamnosamine," should read -- N-acetylmannosamine, --; and "acide" should read -- acid --.

Column 20.

Lines 19 and 31, "treats" should read -- treated products --;
Line 66, "(3')sialyllacto-N-neotetraose" should read -- (α 2,3)sialyllacto-N-neotetrerase --; and
Line 67, "N-acetylamnosamine," should read -- N-acetylmannosamine, --.

Column 21.

Line 67, "N-acetylamnosamine," should read -- N-acetylmannosamine, --.

Column 23.

Line 2, "cataxahlis," should read -- catarahlis, --;
Line 8, "sendai" should read -- Sendai --;
Line 31, "bodas" should read -- bodies --;
Line 54, "P_Lpromoter" should read -- P_L promoter --;
Line 58, "BF-5407)" should read -- BP-5407 --;
Line 65, "Difco),5" should read -- Difco), 5 --; and
Line 66, "pH 7.2)" should read -- pH 7.2 --.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 24.

Line 54, "antisence" should read -- antisense --.

Column 25.

Line 38, "mid The" should read -- mid ¶ The --;

Line 39, "antisence" should read -- antisense --; and

Line 53, "gal" should read -- gel --.

Column 26.

Line 50, "MgSO₄.7H₂O," should read -- MgSO₄.7H₂O, --; and "0.1g/l CaCl₂. 10 mg/l FeSO₄.7H₂O," should read -- 0.1g/l CaCl₂.2H₂O, 10 mg/l FeSO₄.7H₂O, --;

Line 51, "ZnSO₄.7H₂O," should read -- ZnSO₄.7H₂O, --;

Line 66, "10 g/l MgSO₄.7H₂O," should read -- 10 g/l MgSO₄.7H₂O --; and "1.0 g/l CaCl₂.2H₂O," should read -- 1.0 g/l CaCl₂.2H₂O, --; and

Line 67, "FeSO₄.7H₂O," should read -- FeSO₄.7H₂O, --.

Column 27.

Line 1, "MnSO₄.4-6H₂O" should read -- MnSO₄.4-6H₂O --;

Line 2, "L-cystaine," should read -- L-cysteine, --;

Line 13, "Corynabacterium" should read -- Corynebacterium --;

Line 14, "5 g/l mg SO₄.7H₂O," should read -- 5 g/l mgSO₄.7H₂O, --;

Line 16, "Nymean" should read -- Nymeen --;

Line 34, "antisence" should read -- antisense --; and

Line 66, "agarosa" should read -- agarose --.

Column 28.

Line 29, "chlorampha-" should read -- chloramphe- --;

Line 35, "NM 522/pNT25/pNT 32" should read -- NM522/pNT25/pNT32 --;

Lines 38, 45, 61 and 66, "Corynabacterium" should read -- Corynebacterium --;

Line 47, "MgSO₄.7H₂O," should read -- MgSO₄.7H₂O, --;

Line 48, "Nymean" should read -- Nymeen --; and

Line 55, "ws" should read -- was --.

Column 29.

Line 2, "Corynabacte-" should read -- Corynebacte- --;

Line 3, "ammoniagene" should read -- ammoniagenes --;

Lines 21, 47 and 60, "Corynabacterium" should read -- Corynebacterium --;

Line 42, "a" should be deleted; and

Line 62, "then for" should read -- then at 40°C for --.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 30.

Line 2, "Corynabacterium" should read -- Corynebacterium --;
Line 3, "5 g/l MgSO₄.7H₂O," should read -- 5 g/l MgSO₄.7H₂O, --;
Line 4, "Nymean" should read -- Nymeen --; and
Line 20, "antisence" should read -- antisense --.

Column 31.

Lines 5, 36 and 66, "antisence" should read -- antisense --;
Line 11, "tho" should read -- the --;
Line 42, "th" should read -- the --; and
Line 46, "gal" should read -- gel --.

Column 32.

Line 2, "plate," should read -- template, --;
Line 8, "gal" should read -- gel --;
Line 18, "NW522" should read -- NM522 --; and
Line 52, "antisence" should read -- antisense --.

Column 33.

Line 7, "plamid" should read -- plasmid --;
Line 14, "gal" should read -- gel --;
Line 19, "fragments" should read -- fragment --;
Line 22, "coil" should read -- coli --;
Line 34, "UDP-GlcHAc" should read -- UDP-GlcNAc --;
Line 35, "KY8415/pNT14,NM522/pNT24," should read -- KY8415/pNT14, NM522/pNT24, --;
Line 45, "6mM MgCl₂.6H₂O," should read -- 6mM MgCl₂.6H₂O, --;
Line 46, "Nymean" should read -- Nymeen --;
Line 53, "UDP-GlcNac" should read -- UDP-GlcNAc --; and
Line 67, "NH522/pNT47" should read -- NM522/pNT47 --.

Column 34.

Line 12, "pT47" should read -- pNT47 --;
Line 15, "MgSO₄.7H₂O," should read -- MgSO₄.7H₂O, --;
Line 63, "5 g/l MgSO₄.7H₂O," should read -- 5 g/l MgSO₄.7H₂O, --; and
Line 65, "200 ml," should read -- 200 ml beaker, --.

Column 35.

Line 23, "5 g/l MgSO₄.7H₂O," should read -- 5 g/l MgSO₄.7H₂O, --; and
Line 42, "antisence" should read -- antisense --.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 36.

Line 40, "chloramphanicol" should read -- chloramphenicol --;
Line 42, "fr" should read -- from --;
Line 49, "antisence" should read -- antisense --;
Line 58, "gal" should read -- gel --; and
Line 65, "subjected" should read -- were subjected --.

Column 37.

Lines 2 and 18, "chloramphanicol" should read -- chloramphenicol --;
Line 15, "NM522/pnK7" should read -- NM522/pNK7 --;
Line 26, "thus obtained the" should read -- the thus obtained --;
Line 38, "MgSO₄.7H₂O" should read -- MgSO₄·7H₂O --; and
Line 53, "antisence" should read -- antisense --.

Column 38.

Line 20, "NM522/pnK7/pNT55" should read -- NM522/pNK7/pNT55 --;
Line 37, "MgSO₄.7H₂O," should read -- MgSO₄·7H₂O, --;
Line 54, "antisence" should read -- antisense --; and
Line 66, "gal" should read -- gel --.

Column 39.

Line 1, "SR + DNA" should read -- SK + DNA --;
Line 2, "RI," should read -- BamHI, --;
Line 19, "gal" should read -- gel --;
Line 47, "Corynabacterium" should read -- Corynebacterium --;
Line 50, "An" should read -- As --;
Line 55, "C600/pNALI1" should read -- C600/pNALI --; and
Line 60, "MgSO₄.7H₂O" should read -- MgSO₄·7H₂O --.

Column 40.

Lines 12 and 28, "RPMI1640.ITPSGF" should read -- RPM1640.ITPSGF --.

Column 42.

Lines 18 and 20, "plamid" should read -- plasmid --; and
Line 43, "5 g/l MgSO₄.7H₂O" should read -- 5 g/l MgSO₄·7H₂O --.

Column 43.

Line 11, "5 g/l MgSO₄.7H₂O" should read -- 5 g/l MgSO₄·7H₂O --;
Line 34, "antisence" should read -- antisense --; and
Line 45, "Gone" should read -- Gene --.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 44.

Line 3, "arose" should read -- agarose --;
Lines 27, 35, 55 and 64, "Corynabacterium" should read -- Corynebacterium --;
Line 38, "g/l MgSO₄.7H₂O" should read -- g/l MgSO₄.7H₂O --; and
Line 66, "5 g/l MgSO₄.7H₂O," should read -- 5 g/l MgSO₄.7H₂O, --.

Column 45.

Line 5, "KH₂PO₄" should read -- KH₂PO₄ --.

Column 46.

Line 6, "5 g/l MgSO₄.7H₂O," should read -- 5 g/l MgSO₄.7H₂O, --; and
Line 20, "solo" should read -- sole --.

Column 51.

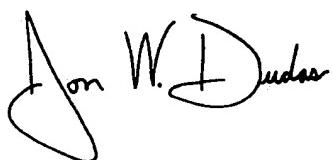
Sequence Listing ID 17, "(close up space)" and "(b)" should read -- (B) --.

Column 56.

Line 51, "cells," (second occurrence) should read -- cells --; and
Line 52, "cells" should read -- cells, --.

Signed and Sealed this

Thirty-first Day of May, 2005



JON W. DUDAS
Director of the United States Patent and Trademark Office